Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

General

Title

Hospital-based inpatient psychiatric services: the total number of hours that all patients admitted to a hospital-based inpatient psychiatric setting were maintained in physical restraint.

Source(s)

Specifications manual for Joint Commission national quality measures, version 2016A. Oakbrook Terrace (IL): The Joint Commission; Effective 2016 Jul 1. various p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the total number of hours that all patients admitted to a hospital-based inpatient psychiatric setting were maintained in physical restraint.

This measure represents the overall rate. The following rates are also reported:

Children age 1 through 12 years
Adolescent age 13 through 17 years
Adult age 18 through 64 years
Older adult age greater than or equal to 65 years

Rationale

Mental health providers that value and respect an individual's autonomy, independence and safety seek to avoid the use of dangerous or restrictive interventions at all times (Donat, 2003). The use of seclusion

and restraint is limited to situations deemed to meet the threshold of imminent danger and when restraint and seclusion are used, such use is rigorously monitored and analyzed to prevent future use. Providers also seek to prevent violence or aggression from occurring in their treatment environments by focusing their attention on prevention activities that have a growing evidence base (Donat, 2003).

Evidence for Rationale

Donat DC. An analysis of successful efforts to reduce the use of seclusion and restraint at a public psychiatric hospital. Psychiatr Serv. 2003 Aug;54(8):1119-23. PubMed

Specifications manual for Joint Commission national quality measures, version 2016A. Oakbrook Terrace (IL): The Joint Commission; Effective 2016 Jul 1. various p.

Primary Health Components

Psychiatric inpatient; physical restraint

Denominator Description

Number of psychiatric inpatient days (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

The total number of hours that all psychiatric inpatients were maintained in physical restraint (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

- Restraint and seclusion are coercive high-risk interventions used in many psychiatric care settings in order to control aggressive and violent behaviors. The use of restraint and seclusion may result in adverse events including death and permanent loss of function for some patients, as well as staff injuries. According to the Joint Commission's sentinel event voluntary reporting database from 2004 through 2011, there have been 110 sentinel events related to physical restraint of a patient resulting in death or permanent loss of function.
- The rationale for restraint and seclusion use is not well understood and varies according to the organization's culture and perception on the most appropriate way to handle escalating behaviors. Restraint and seclusion use adversely impacts healthcare organizations, staff, and patients.
- According to Bergk et al. (2008), rates of seclusion and restraint use vary from 0% to 66%. Reports estimate 50 to 150 deaths per year in the U.S. due to improper monitoring and application. Even in cases where restraints have been applied correctly, fatal patient outcomes have occurred. Additionally, acute excited states resulting from restraint or seclusion have been associated with patient deaths. The use of restraint and seclusion creates significant risks for psychiatric patients.

Among the most serious risks are: injury or death, retraumatization of patients with a trauma history, loss of dignity and psychological harm.

- In mental health, violence is considered endemic. The use of restraint and seclusion contributes to a cycle of workplace violence which may claim as much as 23% to 50% of staff time, account for 50% of staff injuries, increase the risk of injury to patients and staff by 60%, and increase the length of stay, potentially setting recovery back at least 6 months with each occurrence. Results from the National Crime Victimization Survey for 1993 to 1999 which was conducted by the Department of Justice showed the annual rate of nonfatal, job-related violent crime against psychiatrists and mental health professionals was 68.2 per 1,000 and 69.0 per 1,000 for mental health custodial workers as compared to 12.6 per 1,000 for work in all occupations.
- According to Cromwell et al. (2005), the daily cost of care increases with restraint and seclusion use and contributes to significant workforce turnover reportedly ranging from 18% to 62%, costing hundreds of thousands of dollars to several million dollars. The most significant day-to-day cost is the amount of staff time spent managing restraint and seclusion events. The full cost to an organization is unknown due to the lack of research. A time/motion/task analysis of restraint estimated the cost of one episode from $302 to $354, according to the number of restraint methods used (e.g., physical, mechanical, or medication). A 1-hour restraint involved 25 different activities and claimed nearly 12 hours of staff time to manage and process the event from beginning to end. Collectively, restraint use claimed more than 23% of staff time and $1.4 million in staff-related costs, which represented nearly 40% of the operating budget for the inpatient service studied.
- Many hospitals and residential programs, serving different ages and populations, have successfully reduced their use and redirected existing resources to support additional staff training, implement prevention-oriented alternatives, and enhance the environment of care. Significant savings result from reduced staff turnover, hiring and replacement costs, sick time, and liability related costs.

Evidence for Additional Information Supporting Need for the Measure

Bergk J, Einsiedler B, Steinert T. Feasibility of randomized controlled trials on seclusion and mechanical restraint. Clin Trials. 2008;5(4):356-63. PubMed

Besemer D, Siler J, Vargas LA. Sanctuary longitudinal study: innovation, collaboration and frustration. In: Paper presented at the Alliance for Children and Families National Conference; Baltimore. 2008.

Cromwell J, Gage B, Drozd E, Maier J, Osber D, Evensen C, et al. Psychiatric inpatient routine cost analysis. Baltimore (MD): Centers for Medicare and Medicaid Services; 2005.

Flood C, Bowers L, Parkin D. Estimating the costs of conflict and containment on adult acute inpatient psychiatric wards. Nurs Econ. 2008 Sep-Oct;26(5):325-330, 324. PubMed

Florida TaxWatch. Florida State Hospital-Chattahoochee wins award for reduced patient seclusion and restraint. Adaptable achievements from the 2007 Prudential Financial Davis Productivity Awards competition. [internet]. 2008 [accessed 2012 Mar 13].

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General Accounting Office (GAO). Mental health: improper restraint or seclusion use places people at risk. (GAO/HES-99-176). Washington (DC): United States General Accounting Office; 1999.

Haimowitz S, Urff J, Huckshorn KA. Restraint and seclusion: a risk management guide. Alexandria (VA): National Association of State Mental Health Program Directors; 2006.

Huckshorn KA. Re-designing state mental health policy to prevent the use of seclusion and restraint. Admin Policy Ment Health. 2006 Jul;33(4):482-91. PubMed

Institute of Psychiatry (IOP). The recognition, prevention and therapeutic management of violence in mental healthcare, UKCC. [internet]. London (UK): United Kingdom Central Council; 2002 [accessed 2012 Mar 13].

Lebel J, Goldstein R. The economic cost of using restraint and the value added by restraint reduction or elimination. Psychiatr Serv. 2005 Sep;56(9):1109-14. PubMed

National Association of State Mental Health Program Directors (NASMHPD). Position statement on seclusion and restraint. Alexandria (VA): National Association of State Mental Health Program Directors (NASMHPD); 1999.

Paxton D. Creating and supporting coercion-free and violence-free treatment environments: The Village Network and the Knox County Children's Resource Center restraint reduction effort. Paper presentation. Columbus (OH): Ohio Association of Child Caring Agencies Learning Community Conference; 2009.

Richter D, Whittington R, editor(s). Violence in mental health settings: Causes, consequences, management. New York: Springer Science+Business Media, LLC; 2006.

Short R, Sherman ME, Raia J, Bumgardner C, Chambers A, Lofton V. Safety guidelines for injury-free management of psychiatric inpatients in precrisis and crisis situations. Psychiatr Serv. 2008 Dec;59(12):1376-8. PubMed

Substance Abuse and Mental Health Services Administration. The business case for preventing and reducing restraint and seclusion use. HHS Publication No. (SMA) 11-4632). Rockville (MD): Substance Abuse and Mental Health Services Administration; 2011.

The Joint Commission. Sentinel event data - root causes by event type. [internet]. 2011 [accessed 2012 Mar 20].

Extent of Measure Testing

Alpha testing was conducted during May and June 2006 at approximately 40 volunteer test sites to assess feasibility and data collection effort. A set of measures was recommended by the Technical Advisory Panel (TAP) to comprise the final test set addressing the domains of Assessment, Patient Safety and Continuity/Transitions of Care.

The Specification Manual for National Hospital Inpatient Quality Measures Hospital-Based Inpatient Psychiatric Services Test Set was finalized in September 2006. In late 2006 a total of 196 hospitals volunteered to participate in the Hospital-Based Inpatient Psychiatric Services (HBIPS) pilot test. Data collection for the test set began with January 1, 2007 discharges and continued throughout December 31, 2007.

During the first quarter of the pilot test, a subset of 39 hospitals was randomly selected to collect and transmit monthly hospital clinical data (HCD) to help assess data quality and data reliability. The data quality study continued with data collection and transmission for the 12 months of 2007. Feedback on data quality was provided to each performance measurement systems vendor submitting HCD.

The final phase of testing consisted of site visits to a sample of participating pilot hospitals to assess the reliability of data abstracted and reported by those hospitals. Reliability test site visits were conducted at 18 randomly selected pilot hospitals. Selection of the test sites was based on multiple characteristics, including hospital demographics, populations served, bed size and type of facility.

All of the HBIPS measures have undergone a rigorous process of public comment, alpha testing and broad-scale pilot testing and are recognized by the field as important indicators of hospital-based inpatient psychiatric care.

Evidence for Extent of Measure Testing

Domzalski K. (Associate Project Director, Division of Healthcare Quality Evaluation, Department of Quality Measurement. The Joint Commission. Oakbrook Terrace, IL). Personal communication. 2010 Nov 16. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Hospital Inpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

All patients age one year and older

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Making Care Safer

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

IOM Domain

Safety

Data Collection for the Measure

Case Finding Period

Discharges July 1 through December 31

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Institutionalization

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
Number of psychiatric inpatient days

Exclusions
Total leave days

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
The total number of hours that all psychiatric inpatients were maintained in physical restraint

Include patients for whom at least one physical restraint event is reported during the month.

Exclusions
None

Numerator Search Strategy

Institutionalization

Data Source

Administrative clinical data

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

- Hospital-Based Inpatient Psychiatric Services (HBIPS) Initial Patient Population Algorithm Flowchart
- HBIPS-2: Hours of Physical Restraint Use Flowchart

Computation of the Measure

Measure Specifies Disaggregation

Measure is disaggregated into categories based on different definitions of the denominator and/or numerator

Basis for Disaggregation

This measure is disaggregated according to the following age groups:

- Children age 1 through 12 years
- Adolescent age 13 through 17 years
- Adult age 18 through 64 years
- Older adult age greater than or equal to 65 years

Data Reported As: Aggregate rate generated from count data reported as a ratio.

Scoring

Ratio

Interpretation of Score

Desired value is a lower score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

HBIPS-2: Hours of physical restraint use.

Measure Collection Name

National Quality Core Measures

Measure Set Name

Hospital-Based Inpatient Psychiatric Services

Submitter

The Joint Commission - Health Care Accreditation Organization

Developer

The Joint Commission - Health Care Accreditation Organization

Funding Source(s)

All external funding for measure development has been received and used in full compliance with The Joint Commission's Corporate Sponsorship policies, which are available upon written request to The Joint Commission.

Composition of the Group that Developed the Measure

The composition of the group that developed the measure is available at: http://www.jointcommission.org/assets/1/6/HBIPS%20TAP%20Members.pdf .

Financial Disclosures/Other Potential Conflicts of Interest

Expert panel members have made full disclosure of relevant financial and conflict of interest information in accordance with the Joint Commission's Conflict of Interest policies, copies of which are available upon written request to The Joint Commission.

Endorser

National Quality Forum - None

NQF Number

not defined yet

Date of Endorsement

2016 May 12

Measure Initiative(s)

Inpatient Psychiatric Facility Quality Reporting Program

Quality CheckÂ®

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2016 Jul

Measure Maintenance

Every six months

Date of Next Anticipated Revision

2017 Jan

Measure Status

This is the current release of the measure.

This measure updates a previous version: Specifications manual for Joint Commission national quality core measures, version 2015B. Oakbrook Terrace (IL): The Joint Commission; Effective 2015 Oct 1. 327 p.

Measure Availability

Source available from The Joint Commission Web site .

For more information, contact The Joint Commission at One Renaissance Blvd., Oakbrook Terrace, IL 60181; Phone: 630-792-5800; Fax: 630-792-5005; Web site: www.jointcommission.org .

NQMC Status

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Production

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